

Increasing Uncertainty

The Dangers of Relying on Conventional Forces for Nuclear Deterrence

Jennifer Bradley

To put an end to Cold War thinking, we will reduce the role of nuclear weapons in our national security strategy, and urge others to do the same.

—President Barack Obama

In his now-famous Prague speech in 2009 shortly after taking office, President Obama laid out his vision for a world without nuclear weapons.¹ Although he had no timeline for reaching this goal, noting that it might not even occur in his lifetime, part of the pathway to that objective involved reducing the role of nuclear weapons in US national security strategy. The *Nuclear Posture Review (NPR)*, released one year later, further defined and codified his vision for the security of the United States and its allies.² Five years later, some of the implications of how this decision affects the US deterrent relationship with both Russia and China are becoming apparent.

Arguably, these two are the United States' most important relationships and should serve as the cornerstone of US nuclear deterrence policy. Although Russia and China are not identified as adversaries of the United States, neither are they considered allies. Potential always exists for the relationship to sour, and in the case of Russia, that is exactly what has happened over the past year. The US decision to meet the needs of deterrence by relying less on nuclear weapons and instead developing conventional weapons that can have strategic effects may not have had the intended deterrent effect on Russia and China. Far from encouraging them to reduce the importance of nuclear weapons in their national security strategy, it may have inspired them to rely more on nuclear weapons to meet their security needs. Doing so could create dangerous instability in deterrence relationships.

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The Simplicity of Deterrence Theory

Deterrence theory is beautiful in its simplicity. At its essence, the theory is a military strategy in which one power uses the threat of assured retaliation to convince an enemy not to attack. Some people have the misconception that deterrence did not come into existence until after the invention of nuclear weapons, but it has been used as a tool of statecraft, with varying degrees of success and failure, since ancient times.³

The destructive power of nuclear weapons brought deterrence theory to the forefront of US national security strategy. In 1946 Bernard Brodie commented on this phenomenon: "Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose."⁴ The dawn of the nuclear age spurred a tremendous amount of intellectual study and debate on deterrence as well as the ingredients necessary to achieve it. Deterrence became the cornerstone of US security strategy during the latter half of the twentieth century. However, debate on its relevance to twenty-first-century threats continues today.

Precarious Challenge of Deterrence in Practice

As simple as deterrence is to define, its actual practice is far more complicated, having many potential pitfalls for failure, essentially because it is a psychological function in the mind of the adversary. Consequently, success is difficult to predict or prove, and deficiencies may become apparent only when deterrence fails. Further, the definition of deterrence theory is evolving to meet the challenges of the current security environment. Scholars recognized that the Cold War deterrence framework focused solely on deterring the Soviet Union and was inadequate to address the national security issues of the twenty-first century. Today, because the United States faces deterrence problems from multiple actors, our strategy needs to be "tailored to the perceptions, values, and interests of specific adversaries."⁵

An acknowledgment also exists that a cost-imposition deterrence strategy may prove inadequate to decisively influence a foe's decision making. The adversary considers more factors than simply the costs associated with a contemplated action. Rather, he compares the costs of a course of action to the benefits sought and examines the consequences of not acting. That is, even if an enemy believes that the costs are credible and will be incurred, deterrence can still fail because he perceives that the consequences of restraint are so much greater.⁶ This belief demands that our deterrence strategies consider adversary perceptions of both the costs and benefits of a course of action as well as those of restraint. Strategies should be tailored to decisively influence the opponent's decision making by credibly threatening to impose costs, deny benefits, and encourage restraint by convincing the actor that restraint will result in an acceptable outcome.⁷

As mentioned above, at its core, deterrence is a psychological function. Understanding the adversary, including his leadership characteristics, historical and cultural influences, decision-making structures and processes, and national security strategy and doctrine, is essential to crafting a deterrence strategy. Because deter-

rence happens in the mind of the enemy, “the requirements for deterrence will differ with each party that we might try to deter and may well differ in each circumstance or scenario.”⁸ Further complicating the functioning of deterrence, the foe must understand the United States and comprehend its threats and communications, believing that they are credible and that the United States possesses the will to impose them.⁹ Failure to consider the individual characteristics of an actor during development of a deterrence strategy increases the risks of failure.

Reduced Emphasis on Nuclear Weapons

The first priority of the *NPR* was to reduce the dangers of nuclear proliferation and the threats of nuclear terrorism. Part of the road map to this goal involved diminishing the reliance on nuclear weapons in US security strategy. The rationale was that by demonstrating its commitment to downsizing the role and numbers of nuclear weapons, the United States would “persuade our NPT [Nuclear Non-Proliferation Treaty] partners to join with us in adopting the measures needed to reinvigorate the non-proliferation regime and secure nuclear materials worldwide against theft or seizure by terrorist groups.”¹⁰

Part of the reasoning for this modification was the changing strategic environment in general and the beneficial relationships with Russia and China specifically. Both Obama’s Prague speech and the *NPR* called for the “end of Cold War thinking” and extolled fundamental changes in the US-Russia relationship.¹¹ The *NPR* went so far as to say that “Russia and the United States are no longer adversaries, and prospects for military confrontation have declined dramatically.”¹² For China, the *NPR* was less clear on how the US-China relationship was changing for the better. Instead, it focused on interdependence between the United States and China and mutual interests in reducing the risks associated with terrorism and the proliferation of weapons of mass destruction.¹³ The notion in the *NPR* was that the changing strategic environment created by an improved relationship with Russia and the interdependence with China meant that the United States no longer needed to rely on nuclear weapons to meet its security needs with regard to these two nuclear power relationships; furthermore, it maintained that this positive trajectory would continue.

Increased Emphasis on Conventional Forces

To bridge the gap between the reduced reliance on nuclear weapons and capabilities needed to meet US security needs, the *NPR* proposed that the United States continue to strengthen its unrivaled conventional capabilities.¹⁴ Although the report declared that “the United States today has the strongest conventional military forces in the world [and that] our close allies and partners field much of the rest of the world’s military power,” it proposed additional capabilities to further increase the strength of US conventional forces.¹⁵

One of the conventional enhancements proposed was conventional long-range missiles. The United States began development of Conventional Prompt Global Strike (CPGS) doctrine in 2003 and continues to pursue it today, with plans to in-

vest approximately \$2 billion between 2011 and 2016.¹⁶ CPGS could hit targets anywhere on the earth within an hour. Its weapons could be based either in the United States or on submarines at sea, giving the US military a conventional precision-strike capability that could be delivered in a short amount of time.¹⁷

According to the Global Zero US Nuclear Policy Commission, the increased lethality and precision of advanced conventional weapons allow the United States to hold at risk enemy targets that, at one time, were susceptible only to nuclear weapons. Furthermore, the commission observed that these weapons would have a greater deterrent effect because they were more “usable” than nuclear weapons. Moreover, the commission’s research showed that a significant number of targets in Russia and China, once vulnerable only to US nuclear weapons, would be threatened by precision conventional forces.¹⁸ Additionally, as US capabilities and investments improve, more targets would become vulnerable to conventional capabilities, enabling the administration to reduce the role of nuclear weapons even further.

The significance of the assertions of the commission’s report is the suggestion that nuclear weapons could be replaced by advanced US conventional capabilities having the same strategic-level effects but with more usable weapons.¹⁹ However, missing from the report was an assessment of how Russia or China would interpret such a change in US deterrence posture.

Foreign Perspective

The security environment has changed dramatically in the five years since the *NPR*’s publication—but not for the better, as the policy document hoped for. Although the downturn in the security environment cannot be correlated to the change in US nuclear policy, some dangerous implications regarding both Russia and China are linked to the United States’ decision to lower its emphasis on nuclear weapons in its security strategy. Arguably, the nuclear deterrent relationships with Russia and China are the ones most important to the United States, so it is imperative to continue to monitor their health and status.

As the *NPR* has been implemented over the last five years and the United States has decreased its emphasis on nuclear weapons while increasing its investment in advanced conventional weapons, Russia and China have responded in ways that the US government may not have anticipated. As outlined above, deterrence occurs in the mind of the adversary, and as adjustments to deterrence policy and strategy occur, they should be evaluated to determine their effect on the enemy’s decision making.

Russian Perspective

Much was made in the *NPR* of the improved dealings between the United States and Russia. With the end of the Cold War rivalry, the United States no longer needed to rely on nuclear weapons to meet its security needs. Further, even though it recognized the policy differences that remained between both nations and that Russia continued to modernize its nuclear forces, the growing cooperation between

the United States and Russia on shared interests as well as the low probability of conflict was enough for the *NPR* to declare that Russia was no longer an enemy.²⁰

As glowingly as the *NPR* painted the affiliation between the United States and Russia, it is clear that Russia did not view the relationship in the same light. Anti-Americanism has a long tradition in the former Soviet Union and continues in modern Russia. Prior to the US-led “reset” in US-Russia relations in 2009, Russian leaders consistently referred to the United States as their principal adversary.²¹ Further, the Russians believed they were under threat by the North Atlantic Treaty Organization (NATO), led by the United States.²² This perception of the United States remained consistent after the reset, and, in fact, the relationship has deteriorated.

After the collapse of the Soviet Union, Russia's conventional military capabilities atrophied and deteriorated. In 2000 to compensate for perceived conventional weakness, Russian military doctrine potentially lowered the threshold for nuclear use, declaring that Russia “keep[s] the right to use nuclear weapons in response to the use of nuclear weapons or other WMD [weapons of mass destruction] against Russia or its allies, as well as in response to large-scale conventional aggression in critical situations for Russian national security.”²³ Russia released an updated nuclear doctrine just prior to the release of the *NPR*. It did not significantly raise the threshold for nuclear use, observing that Russia reserved the right to use nuclear weapons “in the event of aggression against the Russian Federation involving the use of conventional weapons when the very existence of the state is under threat.”²⁴

Russia has witnessed the United States and its allies use their conventional military power successfully and repeatedly since the first Gulf War in 1991. The dichotomy between the United States' and Russia's conventional military power has led Russia to depend on its nuclear forces to deter not only nuclear attack but also conventional conflict with the United States. Further, as the United States develops conventional weapons capable of executing strategic missions, coupled with missile defenses, Russian leaders fear that such developments would negate their ability to retaliate and successfully deter the United States.²⁵ The latest version of Russian military doctrine, released in 2014, articulates this fear: “The creation and deployment of global strategic antiballistic missile systems that undermines the established global stability and balance of power in nuclear missile capabilities, the implementation of the ‘prompt strike’ concept, intent to deploy weapons in space and deployment of strategic conventional precision weapons” are among the major foreign threats.²⁶

Russia places very high value on its nuclear arsenal. Without it, Russia's leadership recognizes that the nation is fundamentally weak. Its status as a nuclear peer to the United States makes it “a state of significance, interest, or consequence.”²⁷ As such, Russia has made modernizing its strategic forces one of the country's highest priorities. Part of this modernization program includes development of a class of nuclear weapons eliminated with the signing of the Intermediate-Range Nuclear Forces Treaty in 1987. Evidence of a Russian treaty violation dates back to 2007, but the United States did not formally charge Russia with misconduct until 2014.²⁸ The treaty banned ground-launched ballistic and cruise missiles with ranges between 500 to 5,000 kilometers. Such missiles can execute short-warning attacks on strategic targets throughout European NATO countries.²⁹

The value that Russia places on its status as a nuclear power was brought into sharp relief after its annexation of Crimea from Ukraine in 2014. On multiple occasions, Russian leadership used nuclear signaling, such as President Vladimir Putin declaring that “Russia is one of the most powerful nuclear nations” as a way of deterring the United States and NATO from intervening.³⁰ Further, Russian foreign minister Sergei Lavrov stated that Russia could deploy nuclear weapons to Crimea without violating international law since the region was now part of Russia.³¹ Russia continues to signal with its nuclear weapons, conducting large-scale nuclear exercises, probing the defenses of NATO allies with nuclear-capable bombers, and issuing statements regarding Russia’s nuclear readiness.

Chinese Perspective

The *NPR* paid much less attention to the deterrent relationship between the United States and China. Whether this tack was a function of asymmetry in the size of the two nuclear arsenals remains uncertain. China’s nuclear arsenal is significantly smaller than that of the United States, but the *NPR* did acknowledge that China lacks transparency regarding its nuclear programs and is undertaking a wholesale modernization, both in quality and quantity, of its nuclear weapons arsenal. The policy document points out that China’s future strategic intentions were unclear regarding both the strategy and doctrine that guide its nuclear deterrent force, as well as the eventual size and scope of those forces. The *NPR* addressed the interdependence between the United States and China, “their shared responsibilities for addressing global security threats,” and the need to promote strategic stability with China without ever defining the necessary ingredients for strategic stability or how it can be realized.³²

China maintains a “no-first-use” policy for its nuclear weapons. That is, the country bases its deterrence on the ability to have a secure second-strike capability—a policy consistently in effect since China acquired nuclear weapons in 1964.³³ Although US policy makers debate the veracity of China’s no-first-use pledge, that nation’s small nuclear force supports a counterstrike capability.³⁴ However, the size and capability of that force are changing to meet China’s security needs. Further, its no-first-use promise appears under debate in the People’s Liberation Army (PLA). According to Maj Gen Yao Yunzhu, “Speculations on a possible change to the [no-first-use] policy have not been conjured up without reason.”³⁵

Why the potential change in China’s nuclear posture and doctrine? According to Chinese military writing, the United States is the main nuclear adversary that China must account for, and “China views advances in . . . [US] ISR [intelligence, surveillance, and reconnaissance], conventional precision strike, and missile defense capabilities as potential threats to the credibility of its nuclear deterrent.”³⁶ It is not the United States’ advanced and superior nuclear capabilities that China perceives as undermining its nuclear deterrent but US advances in conventional capabilities.

How then did China react to the *NPR*’s call to reduce US reliance on nuclear weapons and invest in conventional capabilities to bridge that gap in America’s security needs? Chinese civilian and military strategists have regularly and consis-

tently communicated their concern about a US conventional attack negating China's strategic deterrent prior to the US release of the *NPR* in 2010.³⁷ After publication of that document, Chinese analysts suggested that the US decision to invest in conventional capabilities such as CPGS was part of the United States' desire to seek "absolute security" and maintain its military supremacy. Chinese analysts fear that these advanced conventional capabilities designed by the United States to meet its nuclear deterrence needs are not constrained by the "nuclear taboo" and, in fact, are more usable.³⁸

The Chinese believe that the very usability of advanced conventional weapons designed to perform a deterrence role actually undermines nuclear deterrence and causes other nations to rely more on their nuclear weapons arsenals because they cannot compete with the United States conventionally. Chinese analysts also fear a global conventional-weapons arms race, and some analysts warn that "a world free of nuclear weapons may open the door to the resumption of a large-scale conventional war."³⁹

The most worrisome development from China comes from *The Science of Military Strategy* (December 2013), published to inform Chinese military professionals of how the "People's Liberation Army (PLA) perceives military development in China and around the world" and to offer a framework for the PLA to address them.⁴⁰ In that publication, the authors outline China's concern that its limited nuclear force is vulnerable to a first strike that would negate any ability to execute a retaliatory strike. To address this issue, the authors suggest that China may decide to launch on warning of an impending nuclear attack.⁴¹ Such a decision increases the possibility of an accidental nuclear launch, given the difficulties in characterizing the type of incoming attack or the dangers of a malfunction in the early warning system.

Finally, the *NPR* repeatedly calls for the need to promote strategic stability with China. However, although that concept has been used in the context of nuclear relations for decades, it has no common, universally accepted definition.⁴² Further, it also means that China's concept of what constitutes strategic stability may be different than that of the United States, possibly leading to a misunderstanding. Chinese scholars have recognized this disconnect, noting that US "experts have not given serious consideration to what the true meaning of strategic stability is, and have not adequately prepared to achieve strategic stability with China."⁴³

Although it is not the only component of strategic stability, the Chinese perceive changes in the US nuclear posture as a threat to that stability.⁴⁴ Specifically, Chinese analysts have repeatedly insisted that US advanced conventional capabilities, including CPGS coupled with ballistic missile defense, represent a direct threat to China's secure second-strike capabilities. Therefore, Chinese analysts perceive a major contradiction in the *NPR*. "Advocacy for military capabilities that are seen to be detrimental to strategic stability in the same document that promotes strategic stability ultimately represents a circular logic" that if not addressed will make it difficult for China to participate in talks meant to promote strategic stability.⁴⁵

Implications for Nuclear Deterrence

A gulf exists between how the United States and Russia/China view the value of nuclear weapons. These adversarial perceptions are well documented, predating the development and release of the *NPR*, but were not taken into account during drafting of the new policy. The US decision to rely less on nuclear weapons to meet its national security needs, instead bridging the gap with advanced conventional capabilities, did not have the desired effect on our adversaries. Instead of inspiring confidence, it reinforced some of their worst fears.

The *NPR* overstated the improvement in US-Russia relations, and the US declaration that Russia was not an enemy did not consider how Russia viewed the relationship. Failure to take into account that country's deep-seated suspicion of the United States invalidated the *NPR*'s assumption that improved ties would allow the United States to rely less on nuclear weapons. Further, US policy and Russian policy do not agree on the usability of nuclear weapons. The US desire to decrease the role of nuclear weapons and compensate with conventional weapons suggests that US policy makers do not feel that nuclear weapons are usable. However, this perception contrasts with Russia's nuclear doctrine and statements, which have been consistent for well over a decade, that these weapons are quite usable. These differences are further emphasized as the United States debates unilateral reduction in nuclear capabilities while Russia violates a landmark arms-control treaty to increase the types and capabilities of its nuclear arsenal to gain a strategic advantage.⁴⁶ This situation creates a dangerous divide that has the potential for miscalculation and deterrence failure.

Both Russia and China are concerned with US use of advanced conventional capabilities in a strategic manner to negate their nuclear deterrent. According to the *NPR*, the United States has the strongest conventional capabilities in the world and an alliance system that further augments those capabilities. America has also demonstrated its willingness to use conventional power repeatedly over the last 25 years. The very usability of conventional precision-strike weapons capable of creating effects once reserved only for nuclear forces undermines deterrence by creating or reinforcing perceptions in our adversaries that their nuclear forces are vulnerable and that the United States may have an incentive to strike them. Both China and Russia are reevaluating their nuclear doctrines and relying more on nuclear weapons to counter this perceived threat.

Conclusion

From nuclear weapons' pinnacle of importance at the end of the Cold War to today, the United States has steadily decreased the attention paid to its nuclear arsenal and strategy, but nuclear deterrence has not decreased in its overall importance. It is clear that our adversaries place much more value in their nuclear arsenals than does the United States, precisely to deter America's unmatched conventional power. The US decision to rely more on conventional weapons to achieve nuclear deterrence has created dangerous potential for miscalculation in its deterrent relationships with Russia and China.

The United States has fallen into a “mirror imaging” trap by assuming that other nations place the same low value on nuclear weapons that it does and that they have the same priority of reaching “Global Zero.” The Obama administration has even gone so far as to recommend unilateral nuclear reductions, which were made outside arms-control negotiations with Russia.⁴⁷ Part of this policy is that other nuclear-armed nations will follow the US example and choose to reduce the size of their nuclear arsenal. This assumption does not take into account how our opponents interpret their security environment and the role that nuclear weapons play in safeguarding their interests.

Relations with other nuclear powers have been fairly cooperative and benign since the end of the Cold War. Crises that arose were managed, and peaceful solutions have been negotiated, contributing to the mistaken belief that nuclear weapons are no longer relevant. However, could it be that those weapons encourage leaders to be benign and cooperative?⁴⁸ In 1946 J. Robert Oppenheimer reflected that “it did not take atomic weapons to make man want peace. But the atomic bomb was the turn of the screw. It has made the prospect of war unendurable.”⁴⁹ That is, far from being unusable, nuclear weapons are used every day to encourage compromise in international relations because failure to compromise may lead to the unthinkable.

In drafting the *NPR*, the US government failed to consider the perceptions of our adversaries or to tailor strategy to the unique threat that each poses. As we have pointed out, deterrence is a psychological function in the mind of the adversary. Failure to acknowledge and account for how our enemies view their security environment, their relationship with the United States, their unique history and culture, or the value they place on nuclear weapons to meet their security needs has made our deterrence relationships potentially less stable. Increasing our emphasis on conventional weapons that adversaries view as more usable and a threat to their nuclear arsenals has caused them to feel insecure. To counter this trend, they have modernized and increased the size of their arsenals and rely more on nuclear weapons to meet their security needs.

Nuclear deterrence has always been a risky proposition, and the fact that it has not failed in the past 70 years may have as much to do with our deterrence strategy as plain luck. But as risky as relying on nuclear deterrence is, it is still the “least bad” option and has not lost its relevance. Therefore, it is important that we strive to understand our adversaries as we develop and implement our nuclear-deterrent strategies so that we do not undermine its effectiveness. Nuclear deterrence may be much more fragile than any of us realize. It is imperative that we do not take the “nuclear taboo” for granted by assuming that our adversaries place the same value on the relevance of nuclear weapons that we do.

Finally, in 1960 Herman Kahn came under heavy criticism for his book *On Thermonuclear War* (Princeton University Press, 1960) in which he outlined the possibility of enduring a nuclear war, reducing its likelihood, and coping with the consequences. In response to the criticism, he wrote, “In our times, thermonuclear war may seem unthinkable, immoral, insane, hideous, or highly unlikely, but it is not impossible.”⁵⁰ Today, because it is still not impossible, we must continue to think and learn about the complexities of these issues as the strategic environment

changes, and we must make the effort to understand our adversaries in order to maintain and nurture nuclear deterrence today and in the future. ☛

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